

```
ring nodes :
                         9
                           10
    1 2 3 4
                5
                   6 8
chain bonds :
    5-8 13-25
ring bonds :
                                      8-12 9-10
                                                   10-11 11-12
                        4-5
                                  8-9
    1-2 1-6 2-3
                   3 - 4
                             5-6
exact/norm bonds :
                                  5-8 8-9 8-12 9-10 10-11 11-12 13-25
                        4-5 5-6
    1-2 1-6 2-3 3-4
isolated ring systems :
    containing 1 : 8 :
G1:C, N
G2:[*1],[*2],[*3]
Match level:
    1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:Atom 9:Atom 10:Atom
    11:Atom 12:Atom 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 25:CLASS
Generic attributes :
    15:
                            : Unsaturated
    Saturation
    Number of Carbon Atoms : less than 7 Number of Hetero Atoms : less than 2 \,
    Type of Ring System
                           : Monocyclic
    16:
                            : Unsaturated
    Saturation
    Number of Carbon Atoms : less than 7
    Number of Hetero Atoms : 2 or more
    Type of Ring System
                          : Monocyclic
    17:
```

: Unsaturated

Saturation

```
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic

Element Count :
Node 15: Limited
C,C4
S,S1
O,O0
N,N0

Node 16: Limited
C,C2-3
O,O0-1
S,S0-1
N,N1-2

Node 17: Limited
C,C5
N,N1
```

0,00 S,S0 => ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

L1SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L2SCREEN CREATED

=> Uploading C:\Program Files\Stnexp\Queries\10627573.str

\*1 Hy

17\*<sup>3</sup> Ну<sup>\*3</sup>

25

chain nodes : 13 15 16 17 25 ring nodes : 1 2 3 4 5 6 8 9 10 11 12 chain bonds : 5-8 13-25 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-12 9-10 10-11 11-12 exact/norm bonds :  $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 5-8 \quad 8-9 \quad 8-12 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-25$ isolated ring systems : containing 1 : 8 :

G1:C,N

G2:[\*1],[\*2],[\*3]

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:Atom 9:Atom 10:Atom 11:Atom

12:Atom 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 25:CLASS

Generic attributes :

15:

Saturation

: Unsaturated

```
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic
Saturation
                       : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Type of Ring System
                      : Monocyclic
17:
Saturation
                       : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : less than 2
Type of Ring System : Monocyclic
Element Count :
Node 15: Limited
    C,C4
    S,S1
    0,00
    N,NO
Node 16: Limited
    C, C2-3
    0,00-1
    S, S0-1
    N, N1-2
Node 17: Limited
    C,C5
    N,N1
    0,00
    S, S0
L3
        STRUCTURE UPLOADED
=> que L3 AND L1 NOT L2
     QUE L3 AND L1 NOT L2
=> d 14
```

L4 HAS NO ANSWERS

STR

L1

L2

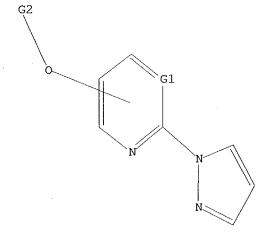
L3

SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

Hv.

Hy 2

ну 3



G1 C,N G2 [@1],[@2],[@3]

Structure attributes must be viewed using STN Express query preparation. L4  $\,$  QUE  $\,$  L3 AND L1 NOT L2  $\,$ 

=> s 14 sss sam SAMPLE SEARCH INITIATED 17:48:11 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 430 TO ITERATE

100.0% PROCESSED 430 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 7356 TO 9844
PROJECTED ANSWERS: 2 TO 124

PROJECTED ANSWERS: 2 TO 124

L5 2 SEA SSS SAM L3 AND L1 NOT L2

=> => s 14 sss ful FULL SEARCH INITIATED 17:48:38 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9041 TO ITERATE

100.0% PROCESSED 9041 ITERATIONS 37 ANSWERS

SEARCH TIME: 00.00.01

L6 37 SEA SSS FUL L3 AND L1 NOT L2

=> => s 16 L7 9 L6

=> d 17 1-9 bib, ab, hitstr

```
ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ь7
     2004:95353 CAPLUS
AN
     140:146161
DN
     Preparation of (4-trifluormethylpyrazolyl)pyrimidines and pyridines as
TI
     Hoffmann, Michael Gerhard; Helmke, Hendrik; Willms, Lothar; Auler, Thomas;
IN
     Bieringer, Hermann; Menne, Hubert
     Bayer CropScience G.m.b.H., Germany
PA
     Ger. Offen., 54 pp.
SO
     CODEN: GWXXBX
     Patent
DT
LΑ
     German
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                         ____
                                            ______
                                                                   20020725 -
                                20040205
                                            DE 2002-10234876
PI
     DE 10234876
                          Α1
                                            WO 2003-EP7574
                                                                   20030714
                                20040212
     WO 2004013129
                          Α1
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             DM, DZ, EC, GD, GE, HR, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC,
             LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NI, NO, NZ, OM, PG, PH,
             PL, RU, SC, SG, SY, TJ, TM, TN, TT, UA, US, UZ, VC, VN, YU, ZA,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
                                                                    20030724
                                20040429
                                            US 2003-627256
     US 2004082475
                          A1
                                20020725
PRAI DE 2002-10234876
                          Α
     MARPAT 140:146161
OS
     Title compds. [I; Z = N, CR8; Q = Q1-Q6; R1, R2 = H, halo, (iso)cyano, OH,
AΒ
     CO2R10, COR10, CH2OH, CH2SH, CH2NH2, NO2, CSNH2, CONH2, (halo)alkyl, etc.;
     R3, R4 = H, halo, cyano, (halo)alkyl, (halo)alkoxy; R5 = halo, cyano,
     (halo)alkyl, (halo)alkoxy, haloalkylthio, etc.; R6 = H, cyano,
     (halo)alkyl, (halo)alkoxy, S(O)nR9; R7 = alkyl, R8 = H, halo, cyano, NO2,
     alkyl, alkoxy, OH, amino, alkylamino, etc; R9 = H, (halo)alkyl; R10 = H,
     alkyl; n = 0-2], were prepared Thus, a mixture of 5-methyl-4-methylsulfonyl-2-
     (4-trifluoromethyl-1H-pyrazol-1-yl)pyrimidine, 3-trifluoromethylphenol,
     and K2CO3 in DMF was stirred for 24 h at room temperature to give 72%
     5-methyl-4-(3-trifluoromethylphenoxy)-2-(4-trifluoromethyl-1H-pyrazol-1-
     yl)pyrimidine. The latter at 20 g/ha gave 90% preemergent control of
     Alopecurus myosuroides, Amaranthus retroflexus, Setaria viridis, and
     Veronica persica.
IT
     340690-18-8P 653593-14-7P 653593-15-8P
     653593-17-0P 653593-18-1P 653593-19-2P
     653593-20-5P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of (trifluormethylpyrazolyl)pyrimidines and pyridines as
        herbicides)
```

Pyridine, 4-methyl-2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6-

[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

340690-18-8 CAPLUS

RN

CN

RN 653593-14-7 CAPLUS

CN Pyrimidine, 5-methyl-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[2-(trifluoromethyl)-4-pyridinyl]oxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 653593-15-8 CAPLUS

CN Pyridine, 2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 653593-17-0 CAPLUS

CN Pyridine, 4-methoxy-2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 653593-18-1 CAPLUS

CN Pyrimidine, 4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 653593-19-2 CAPLUS

CN Pyrimidine, 4-methyl-6-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 653593-20-5 CAPLUS

CN Pyrimidine, 4-methoxy-6-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-

yl]oxy]-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

```
L7
    ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ΑN
    2004:95352
                CAPLUS
     140:146160
DN
     Preparation of (4-trifluormethylpyrazolyl)pyridines and pyrimidines as
TI
    herbicides
    Hoffmann, Michael Gerhard; Helmke, Hendrik; Willms, Lothar; Auler, Thomas;
IN
    Bieringer, Hermann; Menne, Hubert
    Bayer CropScience G.m.b.H., Germany
PΑ
    Ger. Offen., 29 pp.
SO
    CODEN: GWXXBX
DT
     Patent
LA
    German
FAN.CNT 1
    PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
                         ____
    DE 10234875
PΙ
                          Α1
                                20040205
                                            DE 2002-10234875
                                                                    20020725
    WO 2004013131
                          A2
                                20040212
                                            WO 2003-EP7573
                                                                    20030714
    WO 2004013131
                          A3
                                20040506
             AE, AG, AL, AM, AU, AZ, BA, BB, BR, BY, BZ, CA, CN, CO, CR, CU,
             DM, DZ, EC, GD, GE, HR, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC,
             LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NI, NO, NZ, OM, PG, PH,
             PL, RU, SC, SG, SY, TJ, TM, TN, TT, UA, US, UZ, VC, VN, YU, ZA,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
    US 2004072692
                          A1
                                20040415
                                            US 2003-627573
                                                                    20030724
PRAI DE 2002-10234875
                          Α
                                20020725
OS
    MARPAT 140:146160
    Title compds. [I; Z = N, CR8; A = 3-thienyl, substituted 5-6 membered
AΒ
    heterocyclyl,; R1, R2 = H, halo, (iso)cyano, OH, CH2OH, CH2SH, CH2NH2,
    NO2, (halo)alkyl, cycloalkyl, etc.; R3, R4 = H, halo, cyano, (halo)alkyl,
     (halo) alkoxy; R8 = H, halo, cyano, OH, amino, alkyl, alkoxy, alkylamino,
     etc.], were prepared Thus, a mixture of 0.8 g 5-methyl-4-methylsulfonyl-2-(4-
     trifluoromethyl-3-thienyloxy)pyrimidine, 0.44 g 3-hydroxy-5-
     trifluoromethylthiophene, and K2CO3 in DMF was stirred for 6 h at
     60^{\circ} and 48 h at room temperature to give 0.5 g 5-methyl-2-(4-
     trifluoromethyl-1H-pyrazol-1-yl)-4-(5-trifluoromethyl-3-
     thienyloxy)pyrimidine. Several I at 20-80 g/ha gave 80% preemergent and
     90% postemergent control of Digitaria sanguinalis and Veronica persica.
     653601-76-4P 653601-78-6P 653601-81-1P
IT
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of (trifluormethylpyrazolyl)pyridines and pyrimidines as
        herbicides)
RN
     653601-76-4 CAPLUS
     Pyrimidine, 5-methyl-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[5-
CN
     (trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)
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$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 653601-78-6 CAPLUS

CN · Pyrimidine, 5-methoxy-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

$$_{\mathrm{F3C}}^{\mathrm{MeO}}$$
 N N  $_{\mathrm{CF3}}^{\mathrm{N}}$ 

RN 653601-81-1 CAPLUS

CN Pyridine, 2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

```
ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
ь7
        2003:221684 CAPLUS
ΑN
DN
        138:238179
TI
        Preparation of [2-(1H-pyrazol-1-yl)](thienyloxy)pyridines as herbicides
ΙN
        Hofmann, Michael; Parra Rapado, Liliana; Von Deyn, Wolfgang; Baumann,
        Ernst; Kordes, Markus; Misslitz, Ulf; Witschel, Matthias; Zagar, Cyrill;
        Landes, Andreas
                                                                                                       Common Gru.
PA
        BASF Aktiengesellschaft, Germany
SO
        PCT Int. Appl., 56 pp.
        CODEN: PIXXD2
DΤ
        Patent
        German
LA
FAN.CNT 1
        PATENT NO.
                                         KIND
                                                     DATE
                                                                         APPLICATION NO.
                                                                                                                DATE
                                          ____
                                                                         _____
PΙ
        WO 2003022843
                                                     20030320
                                                                         WO 2002-EP9750
                                           A1
                                                                                                                20020831
              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                     CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                     GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                     LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
                     PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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                     RU, TJ, TM
               RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
                     CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
                     PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
                     NE, SN, TD, TG
        EP 1427725
                                                     20040616
                                                                        EP 2002-797941
                                           A1
                                                                                                                20020831
                    AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                     IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
PRAI DE 2001-10144185
                                           Α
                                                     20010907
        WO 2002-EP9750
                                           W
                                                     20020831
OS
        MARPAT 138:238179
        The title compds. [I; R1, R3 = H, halo, cyano, NO2, alkyl, haloalkyl,
AΒ
        alkoxy, haloalkoxy; R2 = H, halo, cyano, alkenyl, alkynyl, haloalkyl,
        haloalkenyl, haloalkynyl, alkoxy, alkenyloxy, alkynyloxy, haloalkoxy,
        alkoxyalkyl, alkylamino, dialkylamino, alkylthio, haloalkylthio,
        alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, COR7;
        R4-R6 = H, halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio,
        haloalkylthio, alkylsulfonyl, haloalkylsulfonyl; R7 = H, OH, alkyl,
        alkoxy, amino, alkylamino, dialkylamino], were prepared as herbicides (no
        data). Thus, a mixture of 3-hydroxy-5-trifluoromethylthiophene,
        4-cyano-2-methylsulfonyl-6-(3-trifluoromethyl-1H-pyrazol-1-yl)pyridine
        (preparation given), and K2CO3 in DMF was stirred for 7 h at 80^{\circ} and for
        72 h at room temperature to give 76% 4-cyano-6-(3-trifluoromethyl-1H-pyrazol-1-
        yl)-2-(5-trifluoromethyl-3-thienyloxy)pyridine.
IT
        501676-73-9P, 3,5-Difluoro-2-(3-trifluoromethyl-1H-pyrazol-1-yl)-6-
        (5-trifluoromethyl-3-thienyloxy)pyridine 501676-75-1P,
        4-Methoxy-6-(3-trifluoromethyl-1H-pyrazol-1-yl)-2-(5-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluoromethyl-3-trifluorome
        thienyloxy)pyridine 501676-79-5P, 4-Cyano-6-(3-trifluoromethyl-
        1H-pyrazol-1-yl)-2-(5-trifluoromethyl-3-thienyloxy)pyridine
        501676-83-1P, 3-Methyl-6-(3-trifluoromethyl-1H-pyrazol-1-yl)-2-(5-
        trifluoromethyl-3-thienyloxy)pyridine 501676-84-2P
        501676-85-3P 501676-86-4P 501676-88-6P
        RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
        (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
        (Uses)
              (preparation of (pyrazolyl) (thienyloxy) pyridines as herbicides)
```

RN 501676-73-9 CAPLUS

CN Pyridine, 3,5-difluoro-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-75-1 CAPLUS

CN Pyridine, 4-methoxy-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-79-5 CAPLUS

CN 4-Pyridinecarbonitrile, 2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-83-1 CAPLUS

CN Pyridine, 3-methyl-6-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-2-[[5-

(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-84-2 CAPLUS

CN Pyridine, 2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-85-3 CAPLUS

CN 3-Pyridinecarbonitrile, 6-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-2-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-86-4 CAPLUS

CN Pyridine, 3-(trifluoromethyl)-6-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-2-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501676-88-6 CAPLUS

CN Pyridine, 3,4,5-trichloro-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

$$F_3C$$
 $C1$ 
 $N$ 
 $N$ 
 $CF_3$ 

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7
     ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN
     2003:221672 CAPLUS
     138:238178
DN
     Preparation of [2-(1H-pyrazol-1-yl)] (thienyloxy) pyridines as herbicides
TI
     Hofmann, Michael; Parra Rapado, Liliana; Von Deyn, Wolfgang; Baumann,
IN
     Ernst; Kordes, Markus; Misslitz, Ulf; Witschel, Matthias; Zagar, Cyrill;
     Landes, Andreas
PΑ
     BASF Aktiengesellschaft, Germany
     PCT Int. Appl., 47 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                          KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
                          ____
                                 _____
                                             _____
                                                                     20020831
PΙ
     WO 2003022831
                          A1
                                 20030320
                                             WO 2002-EP9751
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                                 20040616
                                             EP 2002-762468
                                                                     20020831
     EP 1427719
                           A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     US 2004198609
                          Α1
                                 20041007
                                             US 2004-487549
                                                                     20040224
PRAI DE 2001-10144073
                                 20010907
                          Α
     WO 2002-EP9751
                           W
                                 20020831
     MARPAT 138:238178
OS
     The title compds. [I; R1, R3 = H, halo, cyano, NO2, alkyl, haloalkyl,
AB
     alkoxy, haloalkoxy; R2 = alkyl, cycloalkyl; R4-R6 = H, halo, cyano, alkyl,
     haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfonyl,
     haloalkylsulfonyl; whereby if R2, R3 = H then R1 \neq Me], were prepared
     Thus, a mixture of 2,3,5-trifluoro-4-methyl-6-(5-trifluoromethyl-3-
     thienyloxy)pyridine (preparation given), \bar{3}-trifluoromethyl-1H-pyrazole, and K2CO3 in DMF was heated up at 80° for 12 h to give 59%
     3,5-difluoro-4-methyl-2-(3-trifluoromethyl-1H-pyrazol-1-yl)-6-(5-
     trifluoromethyl-3-thienyloxy)pyridine. The latter at 0.25 or 0.125 kg/ha
     was said to show very good postemergent herbicidal activity against
     Amaranthus retroflexus, Chenopodium album, Galium aparine, Pharbitis
     purpurea.
     501682-20-8P, 3,5-Difluoro-4-methyl-2-(3-trifluoromethyl-1H-
     pyrazol-1-yl)-6-(5-trifluoromethyl-3-thienyloxy)pyridine
     501682-23-1P, 4-\text{Ethyl}-2-(3-\text{trifluoromethyl}-1H-pyrazol-1-yl)-6-(5-
     trifluoromethyl-3-thienyloxy)pyridine 501682-24-2P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
         (preparation of (pyrazolyl)(thienyloxy)pyridines as herbicides)
RN
     501682-20-8 CAPLUS
     Pyridine, 3,5-difluoro-4-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-
CN
     [[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)
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RN 501682-23-1 CAPLUS

CN Pyridine, 4-ethyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 501682-24-2 CAPLUS

CN Pyridine, 3,5-dibromo-4-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ь7
     ANSWER 5 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
                  CAPLUS
ΑN
     2003:154428
     138:187777
DN
     Preparation of (heterocyclyl) (thienyloxy) pyrimidines as herbicides
TI
IN
     Parra Rapado, Liliana; Von Deyn, Wolfgang; Hofmann, Michael; Baumann,
     Ernst; Kordes, Markus; Misslitz, Ulf; Zagar, Cyrill; Witschel, Matthias;
     Landes, Andreas
PΑ
     BASF Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 68 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     German
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                               APPLICATION NO.
                                                                       DATE
                          ____
                                                                       20020730
PI
     WO 2003016308
                           Α1
                                  20030227
                                               WO 2002-EP8451
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     EP 1421080
                                  20040526
                                               EP 2002-764808
                                                                       20020730
                           A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                  20041007
                                              US 2004-486398
                                                                       20040211
     US 2004198758
                           Α1
PRAI DE 2001-10139404
                           Α
                                  20010817
     WO 2002-EP8451
                           W
                                  20020730
OS
     MARPAT 138:187777
     Title compds. [I; W, X, Y, Z = N, at least one CR3; R1 = H, halo, cyano,
AB
     alkyl, haloalkyl, alkoxy, haloalkoxy; R2 = H, halo, cyano, alkyl, alkenyl,
     alkynyl, haloalkyl, haloalkenyl, haloalkynyl, alkoxy, alkenyloxy,
     alkynyloxy, haloalkoxy, alkoxyalkyl, alkylamino, dialkylamino, alkylthio,
     haloalkylthio, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl,
     haloalkylsulfonyl, CO2R7, CONR8R9; R3 = H, halo, cyano, NO2, alkyl,
     haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, alkylsulfonyl, CO2R7; R4-R6 = H, halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy,
     alkylthio, haloalkylthio, alkylsulfonyl, haloalkylsulfonyl; R7 = H, alkyl,
     alkenyl, alkynyl, haloalkyl; R8 = H, alkyl, alkenyl, alkynyl, alkoxy; R9 = H, alkyl, alkenyl, alkynyl], were prepared Thus, a mixture of
     5-methyl-4-methylsulfonyl-2-(3-trifluoromethyl-1H-pyrazol-1-yl)pyrimidine
     (preparation given), 5-(trifluoromethyl)thiophene-3-ol, and Na2CO3 in DMF was
     stirred for 2 h at 25° to give 54% 5-methyl-2-(3-trifluoromethyl-1H-
     pyrazol-1-yl)-4-[(5-trifluoromethylthien-3-yl)oxy]pyrimidine. The latter
     at 0.25 or 0.125 kg/ha was said to show very good postemergent herbicidal
     activity against Amaranthus retroflexus, Chenopodium album, Galium
     aparine, Pharbitis purpurea, and Polygonum persicaria.
IT
     401517-70-2P 498549-81-8P 498549-82-9P
     498549-83-0P 498549-85-2P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
```

(preparation of (heterocyclyl) (thienyloxy) pyrimidines as herbicides)

RN 401517-70-2 CAPLUS

CN Pyrimidine, 5-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 498549-81-8 CAPLUS

CN Pyrimidine, 2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

$$F_3C$$
 $S$ 
 $CF_3$ 

RN 498549-82-9 CAPLUS

CN Pyrimidine, 4-methoxy-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 498549-83-0 CAPLUS

CN Pyrimidine, 4-(trifluoromethyl)-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RN 498549-85-2 CAPLUS

CN Pyrimidine, 4,5-dimethyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10/627,573

L7 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:688553 CAPLUS

DN 137:181107

TI Herbicidal 2-aryloxy-4-methyl-6-pyrazol-1-yl-pyridines

IN Maier, Thomas; Kleemann, Axel; Scheiblich, Stefan; Baltruschat, Helmut Siegfried

PA BASF Aktiengesellschaft, Germany

SO U.S., 9 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
TAILNI NO.	TTND			
PI US 6448204 PRAI US 1999-166004P	B1 P	20020910 19991117	US 2000-708203	20001108

OS MARPAT 137:181107

AB Compds. I (A = (un)substituted aryl, (un)substituted 5- or 6-membered nitrogen- or sulfur-containing heteroarom., or difluorobenzodioxoly), or agriculturally acceptable salts or N-oxides thereof posess herbicidal activity and are used in herbicidal compns. together with an agronomically acceptable carrier.

IT 340690-15-5 340690-16-6 340690-18-8 340690-20-2

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
 (herbicide)

RN 340690-15-5 CAPLUS

CN Pyridine, 2-[(2-chloro-4-pyridinyl)oxy]-4-methyl-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 340690-16-6 CAPLUS

CN Pyridine, 2-[[2-(difluoromethoxy)-4-pyridinyl]oxy]-4-methyl-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

$$_{\mathrm{F}_{3}\mathrm{C}}^{\mathrm{N}}$$
  $_{\mathrm{N}}^{\mathrm{Me}}$   $_{\mathrm{O-CHF}_{2}}^{\mathrm{Me}}$ 

RN 340690-18-8 CAPLUS

CN Pyridine, 4-methyl-2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 340690-20-2 CAPLUS

CN Pyridine, 4-methyl-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[2-(trifluoromethyl)-4-pyridinyl]oxy]- (9CI) (CA INDEX NAME)

IT 340690-14-4P, 4-Methyl-2-(-3-trifluoromethyl-1H-pyrazol-1-yl)-6-(1methyl-3-trifluoromethyl-pyrazol-5-yloxy)-pyridine
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation as herbicide)

RN 340690-14-4 CAPLUS

CN Pyridine, 4-methyl-2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10/627,573

- L7 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2001:915244 CAPLUS
- DN 136:200158
- TI N-azolyl phenoxypyrimidine herbicides: novel inhibitors of carotenoid biosynthesis Part I
- AU Selby, Thomas P.; Drumm, Joseph E.; Coats, Reed A.; Coppo, Frank T.; Gee, Stephen K.; Hay, James V.; Pasteris, Robert J.; Stevenson, Thomas M.
- CS Stine-Haskell Research Center, DuPont Crop Protection, Newark, DE, 19714, USA
- SO ACS Symposium Series (2002), 800(Synthesis and Chemistry of Agrochemicals VI), 74-84
  - CODEN: ACSMC8; ISSN: 0097-6156 American Chemical Society
- DT Journal

PΒ

- LA English
- OS CASREACT 136:200158
- AB Substituted 2-azolyl-4-phenoxypyrimidines represent a new family of highly active herbicides that act by inhibiting carotenoid biosynthesis. Azole substituents on the pyrimidine ring are nitrogen-linked and include pyrazole, imidazole, and triazole. These compds. are active preemergence and postemergence but tend to be more active preemergence. Selectivity was observed on wheat, corn, and soybeans. There was particular interest in these compds. as cereal herbicides for preemergent and early-postemergent weed control. High field efficacy was observed, particularly on broadleaf weeds. Pyrazolylpyrimidine I showed optimum activity in cereal field trials and gave excellent broadleaf weed control at rates as low as 5-10 g/ha, with good wheat safety. This paper will focus on chemical synthesis, biol., structure-activity relationships, mode-of-action, and field activity for compds. of this herbicide class.
- IT 213334-10-2P 213334-17-9P 401517-70-2P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and structure—activity relationships of herbicidal (azolyl)phenoxypyrimidines)

RN 213334-10-2 CAPLUS

CN Pyrimidine, 5-methyl-4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 213334-17-9 CAPLUS

CN Pyrimidine, 5-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[6-(trifluoromethyl)-2-pyridinyl]oxy]- (9CI) (CA INDEX NAME)

RN 401517-70-2 CAPLUS

CN Pyrimidine, 5-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[5-(trifluoromethyl)-3-thienyl]oxy]- (9CI) (CA INDEX NAME)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
L7
AN
        2001:376803 CAPLUS
DN
         134:366871
        Preparation of herbicidal 2-aryloxy-4-methyl-6-pyrazol-1-yl-pyridines
TI
        Maier, Thomas; Kleemann, Axel; Scheiblich, Stefan; Siegfried, Helmut
IN
PA
        Basf Aktiengesellschaft, Germany
SO
         Eur. Pat. Appl., 16 pp.
        CODEN: EPXXDW
         Patent
\mathbf{DT}
        English
LΑ
FAN.CNT 1
         PATENT NO.
                                                                                                                            DATE.
                                              KIND
                                                           DATE
                                                                                 APPLICATION NO.
                                                                                 ______
PI
        EP 1101764
                                               A1
                                                           20010523
                                                                                 EP 2000-125058
                                                                                                                            20001117
         EP 1101764
                                               В1
                                                           20031022
                R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                        IE, SI, LT, LV, FI, RO
        AT 252573
                                               E
                                                           20031115
                                                                                 AT 2000-125058
                                                                                                                            20001117
PRAI US 1999-441871
                                                           19991117
OS
        MARPAT 134:366871
AΒ
        Title compds. (I) [wherein A = (un)substituted aryl, 5- or 6-membered N-
        or S-containing heteroarom., or difluorobenzodioxolyl] and compns. containing I
        were prepared and tested as herbicides. Thus, a mixture of
         2,6-bis(1-methyl-3-trifluoromethylpyrazol-5-yloxy)-4-methylpyridine,
         3-trifluoromethyl-1H-pyrazole, NaH, and sulfolan was heated at 80°C
         for 3 h to give I [A = 1-methyl-3-trifluoromethyl-1H-pyrazol-5-yl] (II).
         In pre-emergence herbicidal evaluations at 0.1 kg/ha, II controlled
         velvetweed, ragweed, sicklepod, deadnettle, mayweed, chickweed,
        blackgrass, crabgrass, barnyard grass, ryegrass, and foxtail with only
         slight effect on corn. In post-emergence tests at 0.1 kg/ha, II
         controlled twelve of thirteen weed species, while a comparison herbicide
        was active on only four species.
IT
         340690-14-4p, 4-Methyl-2-(-3-trifluoromethyl-1H-pyrazol-1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-6-(1-yl)-
        methyl-3-trifluoromethylpyrazol-5-yloxy)pyridine 340690-15-5P,
         2-(2-Chloropyrid-4-yloxy)-6-(4-trifluoromethylpyrazol-1-yl)-4-
        methylpyridine 340690-16-6P, 2-(2-Difluoromethoxypyrid-4-yloxy)-
         6-(4-trifluoromethylpyrazol-1-yl)-4-methylpyridine 340690-18-8P,
         2-(1-Methyl-3-trifluoromethylpyrazol-5-yloxy)-6-(4-trifluoromethylpyrazol-
         1-y1)-4-methylpyridine 340690-20-2P, 2-(2-Trifluoromethylpyrid-4-
         yloxy)-6-(4-trifluoromethylpyrazol-1-yl)-4-methylpyridine
         RL: BAC (Biological activity or effector, except adverse); BSU (Biological
         study, unclassified); SPN (Synthetic preparation); BIOL (Biological
         study); PREP (Preparation)
               (preparation of herbicidal 2-aryloxy-4-methyl-6-pyrazol-1-yl-pyridines)
RN
         340690-14-4 CAPLUS
         Pyridine, 4-methyl-2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6-
CN
         [3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)
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RN 340690-15-5 CAPLUS

CN Pyridine, 2-[(2-chloro-4-pyridinyl)oxy]-4-methyl-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 340690-16-6 CAPLUS

CN Pyridine, 2-[[2-(difluoromethoxy)-4-pyridinyl]oxy]-4-methyl-6-[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

$$_{\rm F_{3}C}$$
  $_{\rm N}$   $_{\rm N}$   $_{\rm O-\,CHF_2}$ 

RN 340690-18-8 CAPLUS

CN Pyridine, 4-methyl-2-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-6[4-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 340690-20-2 CAPLUS
CN Pyridine, 4-methyl-2-[4-(trifluoromethyl)-1H-pyrazol-1-yl]-6-[[2-(trifluoromethyl)-4-pyridinyl]oxy]- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L7
     ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
     1998:621213 CAPLUS
ΑN
DN
     129:245165
TΙ
     Preparation of heteroaryl azole herbicides
     Selby, Thomas P.
IN
PA
     E. I. Du Pont de Nemours & Co., USA
SO
     PCT Int. Appl., 107 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
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                                DATE
                                            APPLICATION NO.
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    WO 9840379
                          A1
                                19980917
                                            WO 1998-US4600
                                                                    19980309
             AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW,
             HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG,
             MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
                                19980929
                                            AU 1998-68638
     AU 9868638
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                                                                    19980309
     AU 725548
                                20001012
                          B2
     EP 970072
                                20000112
                                            EP 1998-914235
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         R: DE, FR, GB, IT
     BR 9815453
                                            BR 1998-15453
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                                20011023
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     US 6172005
                                20010109
                                            US 1999-380425
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PRAI US 1997-39544P
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                                19970311
                                19980309
     WO 1998-US4600
                          W
     MARPAT 129:245165
OS
     The title compds. [I; J = (un)substituted Ph, pyridyl, pyrazolyl, etc.; W
AB
     = N, CR9; X, Y, Z = N, CH, CR9 (provided that only one of X, Y and Z =
     CR9); Q = O, S(O)n, NR10; R1, R2 = H, halo, CN, etc.; R3 = H, halo, C1-4
     alkoxy, etc.; R9 = halo, CN, C1-4 alkoxy, etc.; R10 = H, C1-4 alkyl, C1-4
     haloalkyl; n = 0-2], useful for controlling undesired vegetation, were
     prepared Thus, reaction of 2,6-dibromopyridine with 3-trifluoromethyl-1H-
     pyrazole in the presence of K2CO3 in DMF followed by reacting the
     resulting 2-bromo-6-(3-trifluoromethyl-1H-pyrazol-1-yl)pyridine with
     3-trifluoromethylphenol in the presence of K2CO3 in DMF afforded I [W =
     CH; Q = O; J = 3-(F3C)C6H4; R1 = R2 = H; R3 = CF3; X = N; Y = Z = CH]
     which showed 100% control against blackgrass and crabgrass at 2000 g/ha in
     preemergence test.
     213334-10-2P 213334-12-4P 213334-13-5P
ΙT
     213334-14-6P 213334-15-7P 213334-17-9P
     213334-18-0P
     RL: AGR (Agricultural use); BAC (Biological activity or effector, except
     adverse); BSU (Biological study, unclassified); SPN (Synthetic
     preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of heteroaryl azole herbicides)
     213334-10-2 CAPLUS
RN
     Pyrimidine, 5-methyl-4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-
CN
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2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 213334-12-4 CAPLUS

CN Pyrimidine, 2-[4-chloro-3-(trifluoromethyl)-1H-pyrazol-1-yl]-5-methyl-4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]- (9CI) (CA INDEX NAME)

RN 213334-13-5 CAPLUS

CN Pyrimidine, 5-ethyl-4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 213334-14-6 CAPLUS

CN Pyrimidine, 5-methoxy-4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]- (9CI) (CA INDEX NAME)

RN 213334-15-7 CAPLUS

CN 1H-Pyrazole-4-carbonitrile, 1-[5-ethyl-4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-2-pyrimidinyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 213334-17-9 CAPLUS

CN Pyrimidine, 5-methyl-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]-4-[[6-(trifluoromethyl)-2-pyridinyl]oxy]- (9CI) (CA INDEX NAME)

RN 213334-18-0 CAPLUS

CN Pyrimidine, 2-[4-chloro-3-(trifluoromethyl)-1H-pyrazol-1-yl]-5-methyl-4-[[6-(trifluoromethyl)-2-pyridinyl]oxy]- (9CI) (CA INDEX NAME)

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L2 SCREEN 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L3 STRUCTURE UPLOADED

L4 QUE L3 AND L1 NOT L2

L5 2 S L4 SSS SAM

L6 37 S L4 SSS FUL

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COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.42 199.75

0.42 199.73

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION
CA SUBSCRIBER PRICE

0.00
-6.30

STN INTERNATIONAL LOGOFF AT 17:49:29 ON 12 OCT 2004